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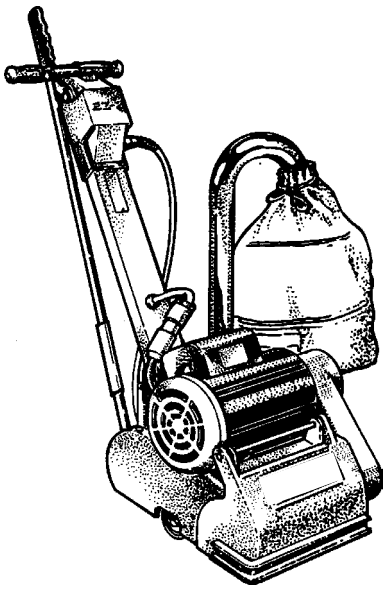
ALTO®

AMERICAN SANDERS TECHNOLOGY

Operator's Manual



EZ-8 Sander

READ THIS BOOK

This book has important information for the use and safe operation of this machine. Failure to read this book prior to operating or attempting any service or maintenance procedure to your American Sanders Technology machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. If your operator(s) cannot read this manual, have it explained fully before attempting to operate this machine.

Si Ud. o sus operadores no pueden leer el Inglés, se hagan explicar este manual completamente antes de tratar el manejo o servicio de esta máquina.

All directions given in this book are as seen from the operator's position at the rear of the machine.

For new books write to: ALTO U.S. Inc., 2100 Highway 265, Springdale, Arkansas 72764.

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OPERATOR SAFETY INSTRUCTIONS

WARNING **AVERTISSEMENT** **ADVERTENCIA**

DANGER means:	Severe bodily injury or death can occur to you or other personnel if the **DANGER** statements found on this machine or in this Owner's Manual are ignored or are not adhered to. Read and observe all **DANGER** statements found in this Owner's Manual and on your machine.
WARNING means:	Injury can occur to you or to other personnel if the **WARNING** statements found on your machine or in this Owner's Manual are ignored or are not adhered to. Read and observe all **WARNING** statements found in this Owner's Manual and on your machine.
CAUTION means:	Damage can occur to the machine or to other property if the **CAUTION** statements found on your machine or in this Owner's Manual are ignored or are not adhered to. Read and observe all **CAUTION** statements found in this Owner's Manual and on your machine.

DANGER: Failure to read the Owner's Manual prior to operating or attempting any service or maintenance procedure to your American Sanders Technology machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. **If you or your operator(s) cannot read English, have this manual explained fully before attempting to operate this machine.**

DANGER: Sanding/finishing wood floors can create an environment that can be a fire hazard or explosive. Do not operate this machine around solvents, thinners, alcohol, fuel, floor finishes, wood dust or any other flammable materials. Vapors and wood dust generated by sanding or finishing wood flooring can create an explosive environment. Cigarette lighters, pilot lights, electrical sparks and all other sources of ignition should be extinguished or avoided. Keep work area well ventilated.

DANGER: Hitting a nail while sanding can cause sparks and create an explosion or fire. Always use a hammer and punch to countersink all nails before sanding floors.

DANGER: Spontaneous combustion or an explosion can occur when working with sanding dust. The sanding dust can ignite and cause injury or damage. Never over fill dust bag or leave machine unattended with dust in bag. Empty the sanding dust in a metal container clear of any combustible materials. Do not empty into fire.

DANGER: Operating a machine that is not completely or fully assembled could result in injury or property damage. Do not operate this machine until it is completely assembled. Keep all fasteners tight. Keep adjustments according to machine specifications.

DANGER: Moving parts of this machine can cause severe injury. Keep hands, feet and loose clothing away from all moving parts of the sander. Disconnect machine from power source before accessing the sanding drum, drive belts, or fan chamber. Do not operate unless drum cover, belt guard, and dust pipe are in place. Never leave machine unattended while motor is running or connected to power source.

DANGER: Electrocution or injury could occur if the power cord encounters the sanding drum. Keep the cord clear of the sanding drum. Always lift the power cord over the machine.

DANGER: Electrocution or severe injury could occur if machine is connected to an electrical system that is not properly grounded. Do not remove or disable grounding pin.

DANGER: Electrocution could occur if maintenance or repairs are performed on a machine that has not been disconnected from the power source. Always unplug machine before servicing.

WARNING: Sanding dust can be airborne and can be breathed in while operating a sander. Always wear a dust mask while operating sanding equipment.

WARNING: Injury to the eyes and/or body can occur if protective clothing and/or equipment is not worn while sanding. Always wear safety goggles, protective clothing, and a dust mask while performing any sanding operation.

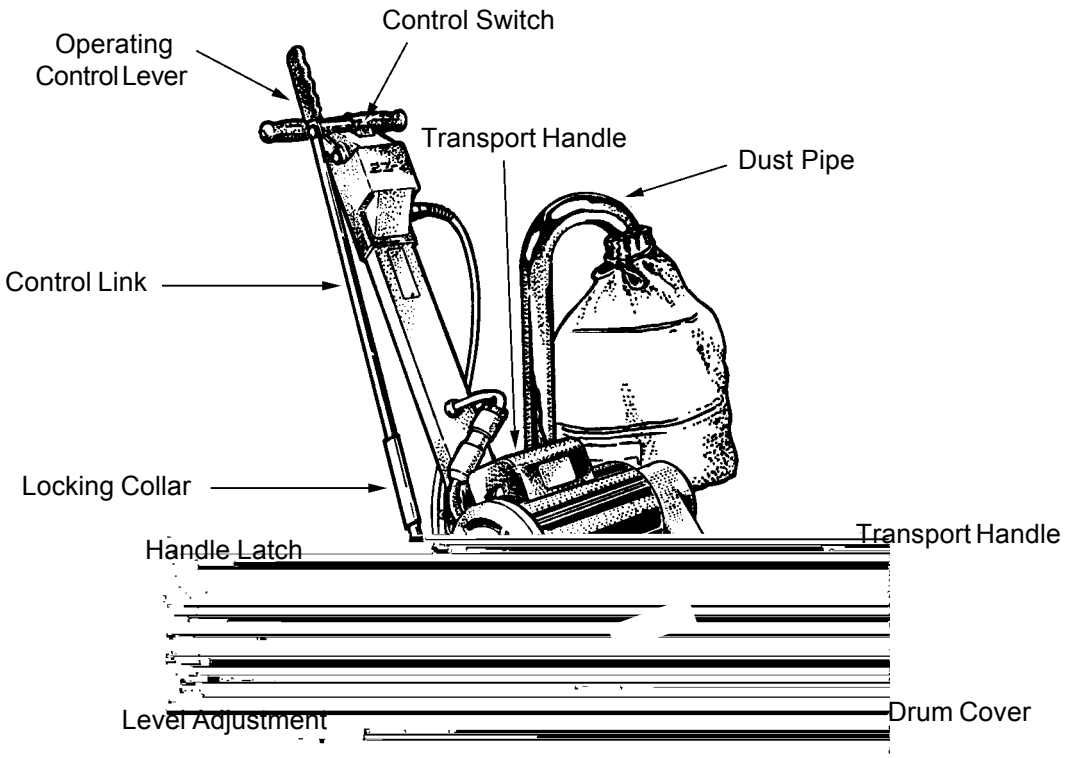
CAUTION: Maintenance and repairs performed by unauthorized personnel could result in damage or injury. Maintenance and repairs performed by unauthorized personnel will void your warranty. Servicing of this unit must always be referred to an authorized American Sanders Technology distributor.

CAUTION: Use of this machine to move other objects or to climb on could result in injury or damage. Do not use this machine as a step or furniture. Do not ride on this machine.

CAUTION: The machine is heavy. Use the proper lifting technique when transporting the machine. Get help to lift the machine.

CAUTION: Serious damage to the floor can occur if the machine is left running in one spot while the sanding drum is in contact with the floor. To avoid damage to the floor, feather cut in at a normal sanding rate. Do not dwell while lowering or raising the sanding drum. Always sand at a constant rate.

Introduction & Machine Specifications



Model	07057A	07058A	07059A	07060A
Abrasive Size	8 in x 19 3/16 in sheet	8 in x 19 in sleeve	8 in x 19 3/16 in sheet	8 in x 19 in sleeve
Abrasive Rate	2680 ft/min	2830 ft/min	2230 ft/min	2360 ft/min
Drum Rate	1800 RPM	1800 RPM	1500 RPM	1500 RPM
Dust Control Rate	76 CFM	76 CFM	64 CFM	64 CFM
Drum Pressure	25 lbs	25 lbs	25 lbs	25 lbs
Leveling Controls	Externally Adjustable	Externally Adjustable	Externally Adjustable	Externally Adjustable
Operating Controls	Lever Operated	Lever Operated	Lever Operated	Lever Operated
Motor	1½ HPTEFC Thermally Protected	1½ HPTEFC Thermally Protected	1½ HPTEFC Thermally Protected	1½ HPTEFC Thermally Protected
Power Cable	40' 12 Gauge Abrasive Resistant	40' 12 Gauge Abrasive Resistant	40' 12 Gauge Abrasive Resistant	40' 12 Gauge Abrasive Resistant
Voltage/Frequency	115 / 60	115 / 60	240 / 50	240 / 50
Amperage	12	12	6	6
Dimensions (in)*	21½x16x35½"	21½x16x35½"	21½x16x35½"	21½x16x35½"
Weight (lbs)*	125	125	125	125

**Shipping Value*

CAUTION: Your equipment may be inappropriate on some installations. Always consult with the flooring manufacturer on the proper installation, preparation, and finishing of their product. Determine suitability of your equipment in preparing the product.

(3/95)

How to Transport the Machine

Transporting the Machine With Limited Cargo Area:

To transport the machine, follow this procedure:

1. Lower sanding drum with control lever. See figure #1.
2. Slide collar beyond overlap of control link; remove pin from notch. See figure #2.
3. Twist and remove handle pigtail from motor cord. See figure #3.
4. Release handle latches and remove handle from chassis. See figure # 2.
5. Remove dust pipe from chassis.
6. Lift chassis with transport handles and place in cargo area. See figure # 4.

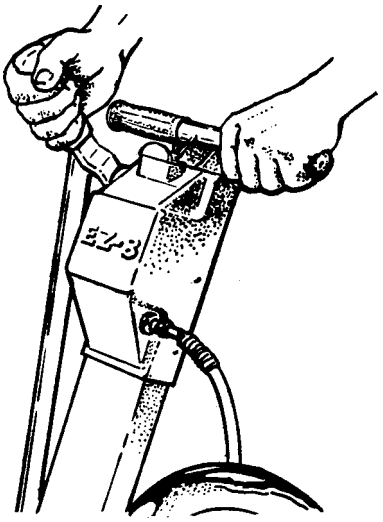


Figure # 1

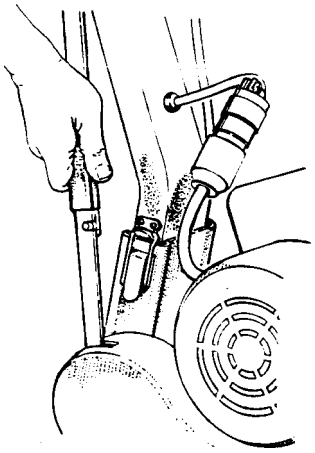


Figure # 2

WARNING: Machine is heavy (95 lbs.). To avoid injury or damage grasp transport handles firmly; use proper lifting technique.

7. Secure chassis to prevent movement in cargo area. Place handle and dust pipe in cargo area.

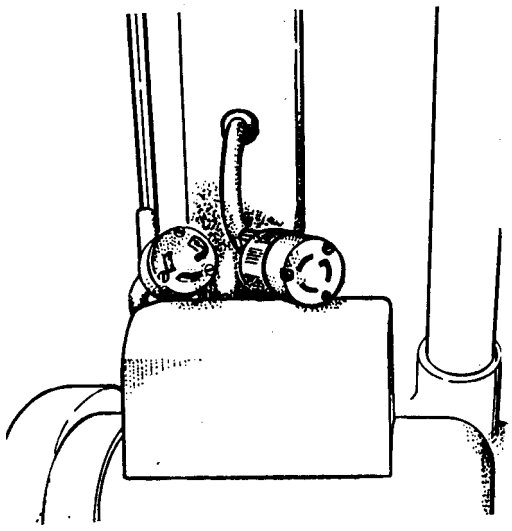


Figure # 3

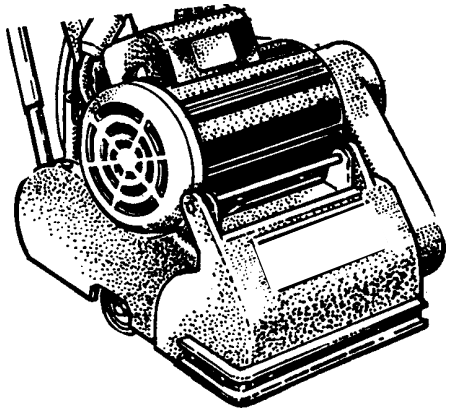


Figure # 4

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Machine Set-up

To set up the machine follow this procedure:

1. Familiarize yourself with the machine. Read all danger, warning, and caution statements as well as the Operator's Manual. If operator is unable to read English, have the manual explained before operating.

2. Install handle and fasten latches. See figure # 6.

3. Insert control link into notch and slide collar to pin. Raise sanding drum with control lever. See figure # 5 & # 6.

4. Install dust tube. Tie dust bag over bell opening of dust tube.

5. Connect the handle pigtail to the motor cord. Align ground pin, insert and twist. See figure # 7.

6. To install abrasive on sanding drum equipped with paper clamp: loosen screws to paper clamp with a coin. Do not remove screws or clamp from the sanding drum. Insert one edge of abrasive under paper clamp. Rotate sanding drum to wrap abrasive around drum. Insert other edge of abrasive under paper clamp. Center abrasive and take up any slack in the abrasive. Tighten screws on paper clamp. Close drum cover. See figure # 8.

   To install abrasive on sanding drum equipped for sleeve abrasive: slide abrasive over drum, center abrasive, and close drum cover.

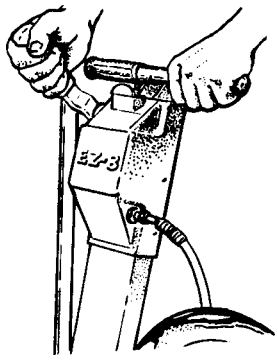

Figure # 5

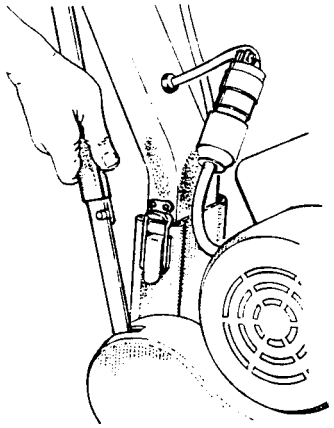

Figure # 6

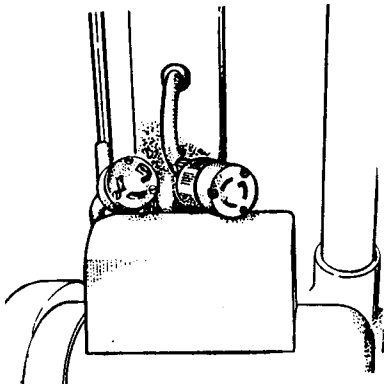

Figure # 7

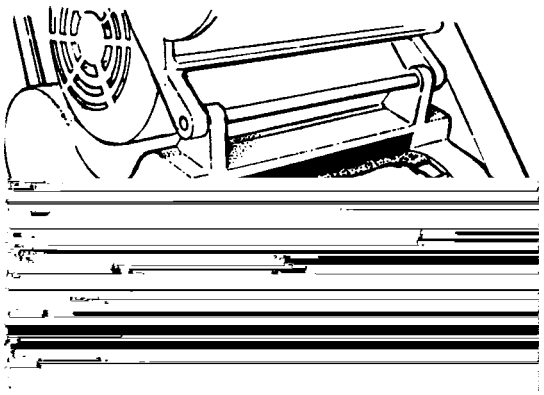

Figure # 8

How to Operate the Machine

To operate the machine follow this procedure:

1. Set any exposed nails with a hammer and punch to avoid encounter with sanding drum. Connect the machine to an appropriate grounded and fused circuit (power supply). Press the selector switch to the start (S) position. Once started, allow switch to return to run (R) position.

How to Operate the Machine (cont.)

CAUTION: To prevent damage to the surface, make sure the machine is always moving when the sanding drum is in contact with the floor.

2. Work right to left. For each forward pass, move the machine 4" over the pass you have just finished. Retrace your reverse path without overlapping. See figure # 9

3. Feather-cut in by easing the sanding drum down onto the surface with the control lever while the sander is in motion.

4. When sanding drum is fully engaged with the surface, release control lever and adjust your pace for adequate stock removal. Keep sander in motion while the sanding drum is engaged with the surface or dwell marks will occur.

5. Move the machine in the direction of the grain in the wood whenever possible. Sand the surface at a constant pace.

6. Gradually feather-cut out at the termination point (the end of your pass) by easing the sanding drum up with the control lever. Stagger the termination points for a better blend when edging. See figure # 9.

7. When replacing abrasive, emptying contents of dust bag, or when sanding operation is com - pleted, press selector switch to off (O) position. Disconnect the machine from the power supply.

8. Empty dust bag whenever it is 1/3 full. Never leave a dust bag unattended with sanding dust in it. Sanding dust can spontaneously ignite and cause a fire or explosion. Empty dust into a metal container clear of any combustible material.

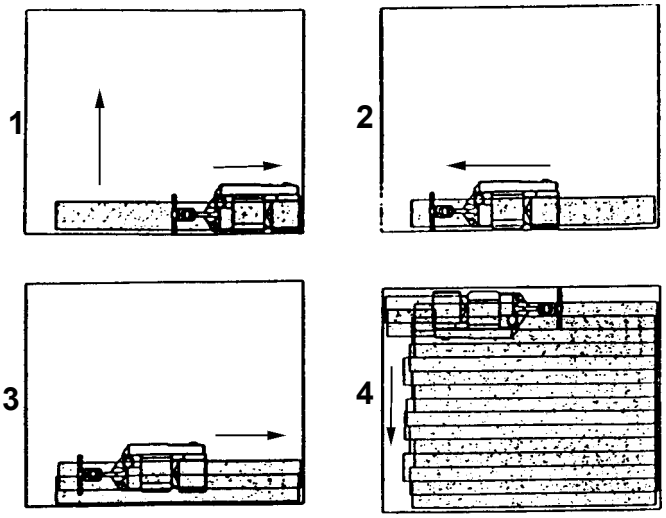

Figure 9

Sanding Cuts and Sandpaper

Initial Cut

The purpose of the initial cut is to remove old finish and gross imperfections on the floor surface. A coarse abrasive should be used. If the surface is severely damaged by deep scratches, pre-existing dwell marks, uneven planks, etc., it may be necessary to sand across or diagonally to the grain to restore evenness to the surface. If these conditions are not present, the initial cut should be done in the direction of the grain.

If glazing, loading, or burning takes place immediately into an initial cut, select a coarser abrasive. If this should occur during an initial cut, the abrasive has dulled and must be replaced.

Final Cuts

The purpose of a finishing cut is to remove the scratches produced during the initial cut. Use a fine (60 - 80 grit) grain abrasive.

If the surface remains rough after a finishing cut, it may be necessary to use an even finer grain of abrasive (80 - 100 grit). Care should be taken in selecting the grit size of the abrasive. A very fine grain will close the pores on a wood floor making admission of a stain difficult.

If glazing or burning should occur immediately into a finishing cut, increase pace. If it should occur during a finishing cut, the abrasive has dulled and must be replaced.

Grain	Use	8 x 18 19/32 Sheet Part No./ Cnt.	8x 19 Sleeve Cloth Back Part No./Cnt.	8 x 18 55/64 Sleeve Paper Back Part No./Cnt.
12 grit 16 grit 20 grit 24 grit	For removing gross imperfections and restore evenness to old flooring. To remove build-up of paints and varnishes	945390/25 945391/25 945392/25 —	— — — 945930/10	— — — 945416/10
36 grit 40 grit	For the first sanding of new flooring (maple, oak). For removing minor imperfections and finishes from old flooring.	945395/25 —	— 945933/10	— 945418/10
50 grit	For first sanding of new flooring (cedar, pine, fir) For clean-up of 16 grit.	945397/25	—	—
60 grit	For clean-up from initial cut 36 grit.	945398/25	945935/10	945420/10
80 grit	For final sanding of certain hardwoods. For clean-up of initial cuts (50 grit).	945399/25	945936/10	945421/10
100 grit	For final sanding of certain hardwoods and conifers where a smooth surface is desired.	945400/25	945937/10	945422/10

Sander Adjustment Procedures

DANGER: Electrocution could occur if maintenance and repairs are performed on a unit that is not properly disconnected from the power source. Disconnect the power supply before attempting any maintenance or service.

DANGER: Moving parts of this machine can cause serious injury and/or damage. Keep hands, feet and loose clothing away from all moving parts of the sander.

The following information provides details on how to adjust different features/controls of the sander.

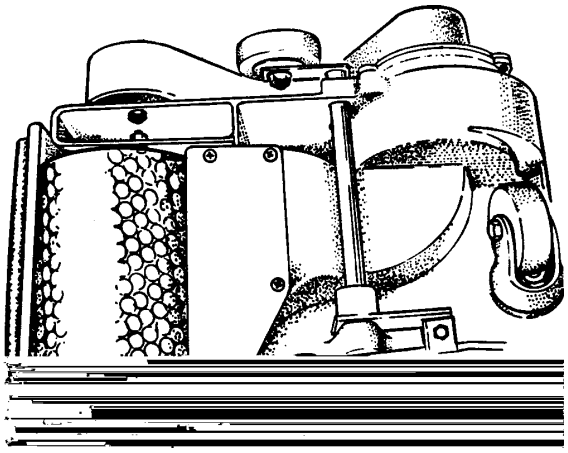

Figure # 10

Dust Shoe

To adjust the dust shoe follow this procedure:

1. Disconnect machine from power supply.
2. Loosen the four screws fastening the dust shoe to the chassis.
3. Adjust the dust shoe towards the drum to improve recovery of fine particles.
4. Adjust the dust shoe away from the drum to improve recovery of coarse particles.
5. Align the dust shoe with the drum and tighten screws. See figure # 10.

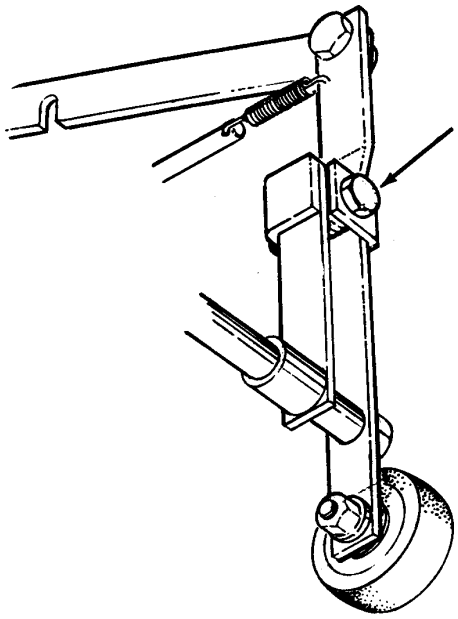

Figure # 11

Leveling

To adjust the machine leveling follow this procedure:

1. Locate the leveling screw. See figure # 11.
2. Tighten the screw (compress the leveling spring) to sand heavier on drive belt side of sanding drum.
3. Loosen the leveling screw (relax the leveling spring) to sand heavier on the side opposite the drive belts.

Routine Maintenance

The following items need to be periodically inspected and maintained to keep your sander in good working condition.

Sanding Chamber

Periodically blow out the sanding chamber to prevent large accumulations of debris which could interfere with the performance of the dust recovery system.

Wheels

Periodically remove the debris from the truck and caster wheels. Debris can cause waves on a sanded surface.

Dust Bag

Remove the dust bag from the machine and shake it thoroughly to remove the sanding dust from the dust bag. Turn the dust bag inside out and machine wash in cold water to prevent pore blockage and loss of dust recovery.

Drive Belt

Periodically check the drive belts for broken cogs or frayed edges. Frayed edges may indicate poor tracking. Realign effected belt.

Bearings

Periodically check the bearings for wear or damage according to the following schedule.

Arbor shaft	Relubricate every 150 hrs. w/.10 oz. of a NLGI grade 2, -30^{0}F to 250^{0}F, 58-75 SUS at 210^0 F, grease lubricant.
Motor shaft	after 1st 5000 hrs.
Fan shaft	After first 1500 hrs.

Troubleshooting

Problem	Cause	Action
Drive belts jump teeth or squeak.	Damaged belt. Insufficient tension. Poor belt tracking.	Replace belt. Tension drive belt. Align Pulley.
Squealing, growling or grinding noise coming from machine.	Damage and/or worn bearing.	Remove drive belts, rotate arbor motor and fan shafts to locate dragging or rough bearing. Contact an authorized American Sanders Technology dealer.
Dust pick-up is poor.	Dust bag is over 1/3 full. Dust bag is dirty. Dust shoe is improperly adjusted. Dust chute is obstructed.	Empty contents of bag. Shake debris from bag and wash. Readjust dust shoe. Remove dust shoe and clear throat.
Motor will not start.	Defective motor starter. Defective start capacitor. Defective start switch. Poor connections. Motor overload tripped. Defective motor. No power.	Contact an authorized American Sanders Technology dealer. Contact an authorized American Sanders Technology dealer. Contact an authorized American SandersTechnology dealer. Check connections. Remove power. Depress reset button on motor Contact an authorized American Sanders Technology dealer. Check power supply and connections.
Motor runs sluggishly.	Low voltage from excessive length, undersized extension cord, or poor connection. Defective run capacitor. Defective motor.	Locate power source nearer to work site. Check connections. Contact an authorized American Sanders Technology dealer. Contact an authorized American Sanders Technology dealer.
Motor overload trips/repeatedly trips	Low voltage from excessive length, undersized extension cord, or poor connection. Excessive load. Defective start switch. Defective motor starter. Defective motor. Defective capacitor.	Remove power, allow motor to cool. Depress reset button on motor. Locate power source nearer to worksite. Check connections. Contact an authorized American Sanders Technology dealer. Contact an authorized American Sanders Technology dealer Contact an authorized American Sanders Technology dealer. Contact an authorized American Sanders Technology dealer. Contact an authorized American Sanders Technology dealer. Contact an authorized American Sanders Technology dealer.
Uneven cut.	Leveling out of adjustment.	Readjust leveling.
Burning or glazing.	Dull abrasive. Too fine of an abrasive.	Replace abrasive. Use a coarser abrasive.
Waves on sanded surface.	Debris on wheels. Flat spot on tire(s).	Remove and clean wheels. Replace tires.